

IN THE CLAIMS

Please add claims 15-20 as indicated below.

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (previously presented) A method for providing a halo implant to a semiconductor device comprising the steps of:

- (a) providing a thin photoresist layer to the semiconductor device that covers a substantial amount of an active area comprising a source region and a drain region of the semiconductor device; and
- (b) providing the halo implant to the semiconductor device, wherein the thin photoresist layer is used as a mask.

Claims 2-3 (cancelled)

Claim 4 (original) The method as recited in claim 1 wherein the halo implant is at approximately 45° angle.

Claim 5 (original) The method of claim 1 which includes the step of providing a lightly doped drain implant before the halo implant providing step (b).

Claim 6 (cancelled)

Claim 7 (original) The method of claim 1 wherein the photoresist layer comprises a deep ultraviolet (DUV) layer.

Claim 8 (previously presented) A system for providing a halo implant to a semiconductor device comprising:

means for providing a think photoresist layer to the semiconductor device, wherein the thin photoresist layer covers a substantial amount of an active area comprising a source region and a drain region of the semiconductor device; and

means for providing the halo implant to the semiconductor device, wherein the thin photoresist layer is used as a mask.

Claims 9-10 (cancelled)

Claim 11 (original) The system as recited in claim 8 wherein the halo implant is at approximately 45° angle.

Claim 12 (original) The system of claim 8 which includes the step of providing a lightly doped drain implant before the halo implant providing step (b).

Claim 13 (cancelled)

Claim 14 (original) The system of claim 8 wherein the photoresist layer comprises a deep ultraviolet (DUV) layer.

Claim 15 (new) A method for implanting a halo implant in a semiconductor device comprising the steps of:

providing a first photoresist layer of a thickness 0.55 μm or greater over an oxide trench of said semiconductor device;

providing a lightly doped drain implant;

removing said first photoresist layer;

providing a second photoresist layer of a thickness between .1 μm to .2 μm over said oxide trench and a substantial portion of a source and a drain region; and

implanting a halo implant using said second photoresist layer as a mask.

Claim 16 (new) The method as recited in claim 15, wherein said halo implant is implanted at a substantially 45 degree angle.

Claim 17 (new) The method as recited in claim 15, wherein said second photoresist layer comprises a deep ultraviolet layer.

Claim 18 (new) A semiconductor device, comprising:

a gate;
an oxide trench;
a drain region adjacent to said oxide trench;
a source region adjacent to said oxide trench; and
a photoresist layer of a thickness between .1 μm to .2 μm over said oxide trench and a substantial portion of said source and said drain region, wherein a halo implant is implanted using said photoresist layer and said gate as a mask.

Claim 19 (new) The semiconductor device as recited in claim 18, wherein said halo implant is implanted at a substantially 45 degree angle.

Claim 20 (new) The semiconductor device as recited in claim 18, wherein said photoresist layer comprises a deep ultraviolet layer.